Lab 6

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Usn 1bm23cs008

Student.java package CIE;

```
public class Student {
protected String name;
protected int[] marks;
public Student(String name)
{
this.name = name;
this.marks = new int[5];
 }
 public String getName()
{
return name;
}
public void setMarks(int[] marks)
{
this.marks = marks;
}
 public int[] getMarks() {
return marks;
}
}
```

Internal.java package CIE;

```
public class Internal extends Student
{
private int[] internalMarks;
public Internal(String name, int[] internalMarks)
{
super(name); this.internalMarks = internalMarks;
this.setMarks(internalMarks);
}
public int[] getInternalMarks()
{
return internalMarks;
}
public void setInternalMarks(int[] internalMarks)
{
 this.internalMarks = internalMarks; this.setMarks(internalMarks);
}

}
```

External.java package SEE;

```
import CIE.Student;
public class External extends Student
{ private int[] externalMarks;
public External(String name, int[] externalMarks)
{
super(name);
this.externalMarks = externalMarks;
```

this.setMarks(externalMarks);

}

public int[] getExternalMarks()

{

return externalMarks;

}

public void setExternalMarks(int[] externalMarks)

{ this.externalMarks = externalMarks;

this.setMarks(externalMarks); }

}

```
import CIE.Internal;
import SEE.External;
import java.util.Scanner;
public class Main { public static void main(String[] args) {
 Scanner sc = new Scanner(System.in);
System.out.print("Enter the number of students: ");
 int n = sc.nextInt();
sc.nextLine();
 Internal[] internalStudents = new Internal[n];
External[] externalStudents = new External[n];
 for (int i = 0; i < n; i++)
{
 System.out.print("Enter the name of student " + (i + 1) + ": ");
String name = sc.nextLine();
System.out.println("Enter internal marks (5 courses) for " + name + ": ");
int[] internalMarks = new int[5]; for (int j = 0; j < 5; j++)
{
internalMarks[j] = sc.nextInt();
}
sc.nextLine();
System.out.println("Enter external marks (5 courses) for " + name + ": ");
int[] externalMarks = new int[5];
for (int j = 0; j < 5; j++)
{
externalMarks[j] = sc.nextInt();
}
 sc.nextLine();
 internalStudents[i] = new Internal(name, internalMarks);
 externalStudents[i] = new External(name, externalMarks); }
 System.out.println("\nFinal Marks for all students:");
for (int i = 0; i < n; i++)
{
int[] internalMarks = internalStudents[i].getMarks();
```

```
int[] externalMarks = externalStudents[i].getMarks();
System.out.println("\nStudent: " + internalStudents[i].getName());
System.out.print("Internal Marks: ");
for (int mark : internalMarks)
{
System.out.print(mark + " "); }
System.out.print("\nExternal Marks: ");
for (int mark : externalMarks)
{
System.out.print(mark + " "); }
System.out.print("\nFinal Marks: ");
for (int j = 0; j < 5; j++)
 {
int finalMark = internalMarks[j] + externalMarks[j];
System.out.print(finalMark + " ");
 }
System.out.println();
 }
sc.close();
}
}
```

```
D:\>cd 1bm23cs008

D:\1bm23cs008>cd NewFolder
The system cannot find the path specified.

D:\1bm23cs008>cd New Folder

D:\1bm23cs008\New folder>javac -d . Student.java

D:\1bm23cs008\New folder>javac -d . Internal.java

D:\1bm23cs008\New folder>javac -d . External.java
External.java:1: error: class, interface, enum, or record expected
External.java package SEE;
^
1 error

D:\1bm23cs008\New folder>javac -d . External.java

D:\1bm23cs008\New folder>javac -d . Main.java
```

```
D:\1bm23cs008\New folder>java Main
Enter the number of students: 1
Enter the name of student 1: abhinav
Enter internal marks (5 courses) for abhinav:
1
1
1
1
1
Enter external marks (5 courses) for abhinav:
2
2
2
2
2

Final Marks for all students:

Student: abhinav
Internal Marks: 1 1 1 1 1
External Marks: 2 2 2 2 2
Final Marks: 3 3 3 3 3
```